

Direct Testimony
of
Bruce A. Larson, P.E.

Energy Division
Electric Section - Engineering Department
Illinois Commerce Commission

Union Electric Company (AmerenUE)
Application for Certificate of Public Convenience and Necessity

September 18, 2001

1 Q. Please state your name and business address.

2 A. My name is Bruce A. Larson. My business address is 527 East Capitol Avenue,
3 Springfield, Illinois, 62701.

4

5 Q. By whom are you employed and in what capacity?

6 A. I am a Senior Energy Engineer in the Electric Section, Engineering Department,
7 Energy Division of the Illinois Commerce Commission ("Commission").

8

9 Q. Please describe your education and professional background.

10 A. I received a Bachelor of Science Degree in Electrical Engineering from Purdue
11 University in December 1975. I am a Registered Professional Engineer in Illinois.
12 I joined the Staff of the Illinois Commerce Commission ("Staff") most recently in
13 January 1990. My past employment includes seven years at the Commission,
14 two years with Public Service Company of Colorado, and five years with Hagler
15 Bailly, a consulting firm.

16

17 Q. Have you previously testified before a regulatory body?

18 A. Yes, I have previously testified before this Commission and similar government
19 bodies in Colorado, Indiana, Ohio, Pennsylvania, Arizona and Connecticut.

20

21 Q. What are your responsibilities as a Senior Energy Engineer in the Electric
22 Section of the Engineering Department?

23 A. My primary responsibilities and duties are in the performance of analyses dealing
24 with the day-to-day, and long-term, operations and planning of the electric utilities
25 serving Illinois. For example, I perform cogeneration tariff reviews, determine
26 used and usefulness of utilities' capital additions to rate base, and review utilities'
27 applications for Certificates of Public Convenience and Necessity ("Certificates").
28

29 Q. What is the purpose of this proceeding?

30 A. AmerenUE has filed a petition to build a new, 50 MW combustion turbine ("CT")
31 power plant at its existing Venice Power Station, located in Venice, Illinois.
32

33 Q. What are your responsibilities in this proceeding?

34 A. Section 8-406(b) of the Public Utilities Act ("Act") provides that:
35

36 The Commission shall determine that the proposed construction will
37 promote the public convenience and necessity if the utility
38 demonstrates:

39 (1) that the proposed construction is necessary to provide
40 adequate, reliable and efficient service to its customers
41 and is the least-cost means of satisfying the service
42 needs of its customers;
43

44 (2) that the utility is capable of efficiently managing and
45 supervising the construction process and has taken
46 sufficient action to ensure adequate and efficient
47 construction and supervision thereof; and
48

49 (3) that the utility is capable of financing the proposed
50 construction without significant adverse financial
51 consequences for the utility or its customers.
52

53 My responsibility in this proceeding is to present an opinion regarding the
54 evidence that AmerenUE ("Company") has submitted in this proceeding to satisfy

the criteria of Section 8-406(b)(1) and (2), of the Act for the proposed project. I will also present an opinion regarding the site selection for the proposed 138kV transmission line that is part of the proposed project.

There are two basic issues that relate to Section 8-406(b)(1). These are the issues of “need”, which pertains to providing adequate and reliable service and the plant “site”, which pertains to part of the least-cost means. In addition, “least-cost” pertains to the selection of the proposed resource from the whole universe of possible alternatives.

Q. Is the proposed peaking unit needed to provide adequate and reliable service for the summer of 2002 and later?

A. Yes. AmerenUE will be unable to provide adequate and reliable service without these units. As a member of the MidAmerican Interconnected Network, AmerenUE is required to maintain a minimum reserve margin of 15% one year in advance of the summer peak and 17% for more than one year in advance. Without this combustion turbine (“CT”), AmerenUE is below the 15% minimum reserve margin for 2002.

Q. Has AmerenUE performed any economic analysis that demonstrates that this specific plant at this site at this time is the least cost alternative?

78 A. No. AmerenUE has not done that. However, Ameren has several current
79 and past studies that show that simple cycle CT's make up a large
80 proportion of new capacity additions in any Ameren least cost plan.

81
82 Q. Why hasn't AmerenUE performed the specific analysis mentioned above?

83 A. AmerenUE had planned to meet its reserve requirements by transferring
84 its customers in Illinois to AmerenCIPS. Our Commission approved that
85 plan in Docket No. 99-0597. However, the Missouri Public Service
86 Commission ("MPSC") did not approve that plan. (Nor did the MPSC
87 disapprove the plan). This left AmerenUE with very little time to make
88 plans to serve all of its load in 2002 and beyond. I should note that this is
89 at least the second time that Ameren has attempted to divide its
90 companies uniformly along state boundaries. AmerenUE is left in the
91 difficult position of planning and operating in both regulated and
92 unregulated jurisdictions.

93
94 Q. Is this plant the least-cost option to provide adequate and reliable service?

95 A. Yes it is. Since the MPSC did not approve the transfer of AmerenUE load,
96 this plant is the only option available because of the short time frame
97 between the realization that additional resources would be prudent and
98 the time the resources are necessary. Given that it is the only alternative,
99 that means that it is also the least cost alternative.

100

101 Q. Why can't AmerenUE buy what it needs from Ameren Energy Marketing
102 Company ("AEMC")?

103 A. There is no reason why AmerenUE cannot get a large amount of capacity
104 from AEMC. However, Missouri requires AmerenUE to conduct
105 competitive bidding before it buys from AEMC. While Illinois does not
106 require competitive bidding per se, any transaction between AmerenUE
107 and an affiliate would require a 7-101 proceeding and approval from the
108 Commission. In addition, the purchase would have to be prudent. One
109 way, and perhaps the best way, to show that purchases from an affiliate
110 are in the customers' best interest is to conduct a competitive RFP for
111 power.

112
113 Construction of this small CT does not close or preclude purchases from
114 either the affiliate or anyone else. AmerenUE requires more than 400 MW
115 in addition to the construction of this CT. I believe that building and
116 owning part of the capacity requirements and purchasing part of the
117 capacity requirements is, in a sense, the use of a portfolio. It is probably
118 less risky than building all the capacity or using purchased power for all
119 the capacity. Using only power purchases can be very risky because of
120 the volatility of prices.

121 Q. What impact will this project have, if any, on competition in AmerenUE's
122 Illinois territory?

123 A. It should have very little impact. However, by installing new capacity,
124 more transmission capacity is left available than if AmerenUE purchased
125 the power itself. I understand from AmerenUE's testimony that one of the
126 reasons the Company is building capacity is that not much transmission
127 capacity is available.

128

129 Q. Is the site the Company chose for the plant reasonable?

130 A. Yes, it is. The industrial nature of the site and its proximity to power and
131 gas lines makes for an ideal site. The fact that AmerenUE was able to
132 receive all permits required without objection is further evidence of the
133 site's reasonableness.

134

135 Q. Have you reviewed the route for the proposed 138kV transmission line
136 that will connect this CT to the grid?

137 A. Yes I have. The required 138kV line is very short (2000 ft.) and almost
138 entirely located on AmerenUE property. There is one section that crosses
139 over a highway. UE will need to obtain right-of-way from the city of Venice
140 for this section of the line. At this time there is no reason to believe that
141 the proposed route for the transmission line is not the least cost means of
142 connecting the generator to the grid. However, I intend to visit the site of
143 the CT and review the actual route of the line shortly after this testimony is
144 filed.

145

146 Q. Is AmerenUE capable of efficiently managing and supervising the
147 construction process and has the Company taken sufficient action to
148 ensure adequate and efficient construction and supervision thereof.

149 A. Yes. AmerenUE has assembled a team of engineers that are experienced
150 with the installation of peaking units. Staff believes AmerenUE's
151 suggested monthly progress reports that show the project schedule and
152 cost would be adequate for a project of this size and will satisfy the
153 requirements of Section 8-407(b) of the Act.
154

155 Q. Please summarize your findings and recommendations.

156 A. I believe the proposed CT is necessary to provide adequate, reliable and
157 efficient service to AmerenUE's customers and is the least cost means of
158 satisfying the service needs of its customers. The Commission should
159 grant the Company's request for a Certificate of Public Convenience and
160 Necessity.
161

162 Q. Does this conclude your testimony?

163 A. Yes.
164